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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/711,943

10/14/2004

Tzu-Ming Chou

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5942

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7590

06/16/2008

CONNOLLY BOVE LODGE & HUTZ LLP

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SUITE 1100

WASHINGTON, DC 20036

EXAMINER

PHAM, VAN T

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/711,943	<b>Applicant(s)</b> CHOU ET AL.	
	<b>Examiner</b> VAN T. PHAM	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-9 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### Response to Arguments

Applicant's arguments filed 05/21/2008 have been fully considered but they are not persuasive.

Applicant's asserted, "it is respectfully submitted that the amendment of the claims to remove the term "group" from the claim language, which might be misinterpreted as giving the above list of items the characteristics of a Markush group, where all members of the group are equivalent, now renders the contention in the outstanding Office Actions that: "all 5 different unstable signal sources" are "equivalent" as moot (emphasis added). In fact, the idea that these unstable signal sources are described as "different" in the statement of the outstanding Office Action further indicates that, other than through interpretation as a Markush group as being equivalent," these unstable signal sources would and should be interpreted as different. Thus, it is respectfully requested that the outstanding rejections be withdrawn since Go et al. does not disclose, suggest or make obvious the claimed invention", which is incorrect. Removing the term "group" from the claim does not make the 5 different unstable signal sources not equivalent (unstable sources are:

- a focusing error (FE) signal,
- a tracking error (TE) signal,
- a wobble synchronization pattern loss,
- an error rate of demodulating a wobble signal, and
- a frequency of the buffer under-run occurrence. )

In the specification,

[0007] To accomplish the above objective, the present invention discloses a recording method for an optical disk drive. First, at least one unstable signal source during the recording process is detected, where the unstable signal source is selected from the group of the level of a focusing error (FE) signal, the level of a tracking error (TE) signal, a wobble synchronization pattern loss, the error rate of demodulating a wobble signal and the frequency of the buffer under-run occurrence of the optical disk drive. The recording will be paused if any detected value of the unstable signal source exceeds a preset threshold value. Afterwards, the rotation speed of the optical disk drive is decreased, and the recording is resumed with the decreased rotation speed.

Therefore, the unstable signal sources as listed above are equivalent for their purpose in representing an unstable recording condition (see the Office Action mailed on 02/21/2008 for more detail).

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Go et al. (US 2003/0198155).

Regarding claim 1, discloses a recording method for an optical disk drive, comprising the steps of:

detecting during recording at least one unstable signal source of the optical disk drive (see Fig. 2, element 104),

wherein the at least one unstable signal source is selected from at least one of (see response above)

a level of a focusing error signal,

a level of a tracking error signal (see Fig. 2, and [0020], [0024], [0042], [0012]),

and

a frequency of buffer under-run occurrence, and (see [0052])

ceasing recording if the detected value exceeds a preset threshold value (see Fig. 3, steps 301-305);

decreasing a rotation speed of the optical disk drive (see Fig. 3, step 306); and resuming recording with the decreased rotation speed (see Fig. 3, step 307).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the equivalent unstable signal sources focus error signal or tracking error signal instead of wobble signal as listed above in Go et al., the motivation being in order for an optical disk drive to have any unstable signal sources which are equivalent for their purpose in representing an unstable recording condition.

Regarding claim 2, discloses the recording method for an optical disk drive in accordance with claim 1, further comprising the step of detecting whether the optical disk drive is recording before the unstable signal source is detected (inherently, see Fig. 3 and [0035]).

Regarding claim 3, discloses the recording method for an optical disk drive in accordance with claim 1, further comprising the step of ensuring that the recording is ceased after the operation of stopping recording is instructed (see Fig. 3).

Regarding claim 4, discloses the recording method for an optical disk drive in accordance with claim 1, wherein ceasing recording and decreasing the rotation speed of the optical disk drive are controlled by a microprocessor (Fig. 1).

#### **Allowable Subject Matter**

Claims 5-9 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

#### **Cited references**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to a method of searching for a boundary position between a recorded region and an unrecorded region of a recording disk; and information recording apparatus; Disk drive apparatus capable of resuming the recording process during interruption.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VAN T PHAM/  
Examiner, Art Unit 2627

/Wayne Young/  
Supervisory Patent Examiner, Art Unit 2627